May 2013

# **The Trapline**

United States Department of Agriculture

Animal & Plant Health Inspection Service

Wildlife Services



Cooperating with:

Nevada

Department of Agriculture
Division of Resource Protection





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### **Mission Statement**

The Nevada Wildlife Services Program (WS) is a collaborative program involving the Nevada Department of Agriculture's Division of Resource Protection (State) and the USDA-APHIS-Wildlife Services Program (federal), whose mission is to protect agriculture, natural resources, property, and the human health and safety of the citizens of Nevada from the threat of injury, damage, or resource loss due to wildlife.

#### Introduction

During May, wildlife damage management work was conducted on an estimated 4.4 million acres of land under agreement. On these lands. WS personnel helped Nevada's farmers and ranchers protect over \$39 million in agricultural resources such as cattle, sheep, and livestock feed; and over \$24 million in natural resources. Additionally, WS assisted 169 persons and entities with technical assistance which involves providing information or equipment to cooperators so they can resolve problems themselves. Cooperators reported \$2,183 in damage and WS Specialists verified another \$18,061 in damage to other agricultural resources. These losses would be much higher without an effective wildlife damage management program. During May, coyotes accounted for \$9,421 in verified losses, mostly to livestock, and 247 coyotes were taken with a variety of management methods to resolve these and other ongoing complaints. WS routinely collects blood samples or oral swabs from species taken or handled during normal control activities for monitoring the presence of plague, avian influenza, and other diseases. In May, **60** samples were processed.

The following excerpts are a selection of activities and events of this program which occurred during the month of May, 2013.

#### **Resource Protection**

**State Office** 

During May, 2013, the State Office trap loaning program checked out 17 cage traps. The species distribution for the traps loaned out were: skunks (2), ground squirrels (6), marmots (4) and raccoons (5). Information regarding baits to use, trap placement tactics, handling of trapped animals and safety precautions to take when working with the wildlife species were provided for all equipment loaned.

May was a very busy month for Wildlife Specialist (WS) Derril Fry. During the month, WS Fry documented the loss of thirteen lambs, valued at \$1,105, to coyote predation. WS Fry was able to remove two adult coyotes and two dens, near the kill sites. The Ely and Elko planes were able to remove an additional fourteen adult coyotes and assisted in locating one of the dens that was later removed by WS Fry. WS Fry's sheep docked at the highest rates ever recorded on WS Fry's lambing grounds. "Docked" means the number of lambs per ewe when the lambs are about one month old. The sheep producer was very pleased with these results.



During the month of May, District Supervisor (DS) Joe Bennett and Crew Member (CM) Jerred Taylor continued to assist a large power company in eastern Nevada, removing ravens and their nests



from power poles. The ravens have been causing extensive power outages in several rural communities and in several instances have caused fires from nesting on the power lines. With the many power outages that have occurred, due to raven nests, safety issues have been observed concerning several consumers that require power for oxygen and other medical needs that require electricity. On May 8<sup>th</sup>, with the assistance of the power company's personnel, DS Bennett removed 24 nests on the Nevada-Utah State line. During the past 12 months, the power company has spent more than \$104,000 on non-lethal techniques in an effort to stop the ravens from nesting on

the power poles.

During the month of May, DS Bennett confirmed the loss of 18 lambs valued at \$1,507, to raven predation. The damage occurred just west of Ely, Nevada. DS Bennett utilized hard boiled chicken eggs treated with DRC-1339 to remove an estimated 59 ravens, bringing an end to the damage. The sheep producer reported that in the almost 40 years he has been in business, this was the worst damage and the most ravens he has experienced. DS Bennett also provided technical assistance in the form of non-lethal recommendations to help prevent future problems from occurring.



During the month of May, WS Matt Spires confirmed the loss of eight lambs, valued at \$800, to coyote predation. The damage occurred in eastern White Pine County. WS Spires was able to remove three adult coyotes, utilizing trapping and also removed a den near the sheep. The Ely plane responded to the location and removed an additional eight coyotes near the sheep. No further losses have been reported. WS Spires provided technical assistance in the form of non-lethal recommendations to help prevent future losses.



During the month of May, WS Scott Little did not have any confirmed losses, due to predation, in his assigned work area. This is a testament to WS Little's hard work. Before WS Little arrived in Nevada, losses were extremely high in his work area. The sheep producers have reported that they were on the verge of going out of business, due to high coyote predation. Since WS Little arrived, "it is like night and day" one producer commented. Predation losses

are at an all-time low.



During the first week of May, WS Nathan Fowler confirmed the loss of three lambs, valued at \$300. The damage occurred in a remote portion of central Elko County. WS Fowler hiked into the band of sheep and upon arriving at the kill site, could hear a coyote barking at the sheep herder and his dogs. WS Fowler moved into position and was able to call in and shoot two adult coyotes. No further losses have been reported on this band. WS Fowler provided technical assistance in the form of non-

lethal recommendation to help prevent future problems from happening.

On May 10<sup>th</sup>, the Ely office received a call concerning problems with ravens. The caller was a small sheep rancher in Nye County that reported that ravens had killed four lambs, valued at \$320. The caller said about twenty ravens was in her small farm flock of sheep, as they were lambing. On May 13<sup>th</sup>, DS Bennett responded to the location of the depredations. Boiled chicken eggs, treated with DRC-1339, were placed out near the location that the lambs had been killed. About 10 ravens were observed near the newborn lambs. No further losses have been reported and the rancher was very pleased with the assistance provided by Wildlife Services. Technical assistance was also provided in the form of non-lethal recommendations to help prevent future problems.

On May 13<sup>th</sup>, a sheep rancher near Ely reported that ravens had killed at least four new born lambs,

valued at \$320. The rancher said that he had observed at least 50 ravens attacking his lambs. Two of the lambs were still alive but had their eyes pecked out and had to be put down. DS Bennett responded to the location and placed out eggs, treated with DRC-1339. Several ravens were removed near the location of the damage. No further losses have been reported and DS Bennett is continuing to monitor the area for possible problems. Technical assistance was also provided in the form of non-lethal recommendations to help prevent future problems.

On May 14<sup>th</sup>, WS Billy Taylor received a call, in southern White Pine County, concerning a problem with ravens. The sheep producer reported that ravens had killed at least ten lambs, valued at \$800. Several other lambs had been injured by the ravens. On May 15<sup>th</sup>, WS Tay-



lor responded to the location and confirmed the damage. WS Taylor utilized eggs treated with DRC-1339 to remove the offending ravens. No further losses have been reported and the sheep producer was very pleased with the quick action taken by WS Taylor. Technical assistance was also provided in the form of non-lethal recommendations to help prevent future problems.

On May 17<sup>th</sup>, WS Mac Crome confirmed the loss of one lamb to raven predation. The value of the lamb was placed at \$85. On May 21<sup>st</sup>, WS Crome placed out eggs treated with DRC-1339. Over the next two days, twenty ravens were removed near the kill site. No further raven problems were reported. WS Crome also provided technical assistance in the form of non-lethal recommendations to help prevent future problems from occurring.

On May 28<sup>th</sup>, WS Crome confirmed the loss of three lambs, valued at \$255, to coyote predation in northwest Elko County. In response, WS Crome spent two days utilizing his well trained decoy dog to bring in five depredating coyotes into shooting range, which effectively resolved the problem. To reduce future depredations, WS Crome provided non-lethal technical assistance, although non-lethal methods were already being employed.

During May, WS Dayne Barnes removed five coyotes, one coyote den and an adult male lion on his



Nevada Department of Wildlife (NDOW) project, in Lincoln County. All of the predators taken were in association with mule deer and bighorn sheep protection. The lion removed was an adult male that had been frequenting several bighorn sheep water sources and had killed at least one bighorn ewe in the recent past. WS Barnes caught the lion in a leg hold trap but the lion pulled out of the trap just before WS Barnes checked it. WS Barnes was able to put four of his dogs on the lion's track and treed it several miles away. The lion was skinned and turned over to NDOW the next day.

WS Barnes will continue to work on his assigned project.

During the month of May, WS Scott MacDonald removed 12 badgers, 28 coyotes and 136 ravens on his NDOW sage-grouse protection project in Elko County. Work will be ending soon on this project. WS MacDonald has done an excellent job removing ravens, badgers and covotes to protect the sage-grouse, since the project commenced in March.

During the month of May, WS Taylor removed 13 badgers, eight coyotes and 85 ravens on his NDOW sage grouse protection project in White Pine and Lincoln Counties. Work will be ending soon on this NDOW project as most of the sage-grouse chicks have hatched. WS Taylor has done a great job working both a livestock protection project and the NDOW sage-grouse protection project this spring.



During the month of May, WS Virgil Fullerton had no recorded losses. WS Fullerton's sheep also had record high dockings. WS Fullerton's sheep producers were very pleased with all of WS Fullerton's hard work that no doubt contributed to the record high lamb numbers. WS Fullerton will continue to monitor the many sheep bands in his work area.

During the month of May, Mountain Lion Specialist (MLS) Jim Buhler was running wide open; investigating a number of possible lion caused sheep depredations, in the East District. Currently, MLS Buhler is working on a kill in the Diamond Mountain range.

Lamb losses were very low in the East District this spring, as compared to previous years. Several producers reported record high lamb production. Lamb production was very high in almost all areas of the East District.

#### West District

During the month of May, the West District received numerous lion complaints. Some of the complaints involved as many as 26 sheep. killed on a single producer. Wildlife Specialists did an outstanding job resolving the issues. May is a common time period for lions to ramp up livestock killing in the West District. The onset of warmer weather spoils the lions' prey carcasses faster, so they often kill

many more animals when it is hot, than in the cooler Spring months.

During the month of May, several suburban residents in Washoe and Carson City Counties reported



the loss of six dogs (valued at \$3,000) killed by coyotes. Two of the residents actually saw the coyotes enter their yard, snatch up their small dogs and pack them off before they could rescue their beloved pets. During the month of May, coyotes that seem to cause the most damage are adult coyotes feeding a growing family of pups whose caloric intake increases with their body growth. Coyotes have learned that it is much easier to capture and kill pets, particularly the small which require little handling time, and since there is no hunting or trapping allowed in urban areas, coyotes have free range. Non-lethal technical advice was administered to homeowners to help better protect pets from coyote predation.

On May 6<sup>th</sup>, Pilot Wes Gossard and Crew Member (CM) Brandon VanderMay conducted aerial activities around several lamb bands, in Humboldt County. During the flight, five coyotes were removed. WS Peter provided ground support, during aerial operations. Protection efforts will be ongoing especially as thousands of vulnerable lambs are grazing in coyote country.

On May 7<sup>th</sup>, DS Jack Spencer inspected trail snares placed on the Virginia Mountains bighorn sheep project (hunt unit 022). DS Spencer had previously placed trail snares around several augmented sheep California bighorn populations where both bighorn sheep and lions reside. During the inspection, DS Spencer trail snared a small



male lion within ½ mile of where he earlier spotted four small bighorn rams. DS Spencer also found sign where an adult female was also living in the same area where the male lion was removed. DS Spencer will continue to help protect this growing population of California bighorn sheep. A long time rancher that owns property within the protection area reported that in the last few years he has observed more mule deer and bighorn sheep than in the past 30 years. Protection efforts will continue for a few more weeks before the project ends.

On May 6th, Pilot Gossard and CM VanderMay conducted aerial activities around several lamb bands, in Washoe County. During the flight, six coyotes were removed. WS Doug Koepke provided ground support, during aerial operations. Protection efforts will be ongoing especially with the onset of nearly 7,000 vulnerable lambs on the lambing grounds in this area.



On May 8<sup>th</sup>, a livestock producer from Lyon County reported that seven lambs (valued at \$1,400) had been killed by a lion. WS Nick Smith inspected the situation and confirmed that a male lion had caused the livestock losses. WS Smith placed leghold traps with stiff under-pan tension devices around the vicinity of the dead lambs right before dark, to prevent the capture of non target birds. WS Smith inspected his equipment at 3:30 am and discovered that he had captured the large depredating male lion. No further livestock losses have occurred since the removal of the lion and the livestock producer was very pleased that WS Smith stopped the livestock losses in only several hours' time. WS Smith will continue to protect livestock for his many producers in Lyon and Douglas Counties.

During the week of May 6<sup>th</sup> through May 10<sup>th</sup>, WS Ben Miller was busy checking equipment around known mule deer fawning areas, on the Washoe County Mule Deer project (hunt unit 014). During the week, WS Miller removed five coyotes by utilizing leghold traps, trail snares and his decoy dog. WS Miller will continue to protect mule deer fawns from coyote predation.

On May 13th, Pilot Gossard and CM VanderMay conducted aerial activities around several lamb bands, in Lander County. During the flight, six coyotes were removed. The aerial crew also located a coyote den. WS George Hansen inspected the coyote den and found various lamb parts around the den site.

On May 16<sup>th</sup>, a livestock producer reported that 16 lambs (valued at \$3,600) had been killed by a lion, in Washoe County. This particular lion had killed ten additional lambs the week prior just inside

the California border, then started killing on another lamb band a mile into the Nevada border. WS Koepke and visiting CA-WS George Affonso inspected the situation and determined that a female lion was responsible for the livestock losses. WS Koepke placed leghold traps just before dark around the vicinity of the predated lambs. On May 17<sup>th</sup>, WS Koepke captured the female lion in a leghold trap he had set the previous night. WS Koepke performed a necropsy on the depredating lion and found the stomach packed with lamb parts including: lamb teeth, eyeballs and ears. The livestock losses immediately ceased. The livestock producer was very pleased with WS Koepke's livestock protection efforts and even called the West District Supervisor to express his gratitude. Our "thanks" go out to WS-CA Affonso for



assisting with the situation. This livestock producer and his family have ranched in this area of Washoe County for generations and only during the past 15 years have they had to deal with lions. Prior to that time period, they had not had lion kills or even tracks. The last few years they have experienced lion predation on their livestock by multiple lions. Protection efforts are ongoing.

During the week of May 20<sup>th</sup> through May 22<sup>nd</sup>, WS Miller was busy checking his equipment in and

around mule deer and California bighorn sheep on the Washoe County Mule Deer project (hunt unit 014). DS Spencer conducted a routine field inspection with WS Miller to help pack equipment into remote road-less areas. On May 21st, WS Miller and DS Spencer found two dead mule deer (valued at \$3,000) that had been killed by a large male and female lion. WS Miller had trail snares placed further down the canyon, which, were found to have two lions caught (a 140 lb male and a 4-5 year old female). The lions had only been in the area a few days before being captured.



WS Miller and DS Spencer walked till dark, checking equipment and calling around mule deer fawning areas, which resulted in the removal of three coyotes. They also observed 42 buck mule deer and over 100 does on the 15 hour backpack trap check. WS Miller will continue to protect mule deer and bighorn sheep in his protection area.

On May 20<sup>th</sup>, Pilot Gossard and CM VanderMay conducted aerial activities on several sheep bands,

in Washoe County. During the flight, the air crew removed three coyotes, right out of the lambing range. WS Koepke has to address some other livestock calls, so WS-CA Affonso graciously provided ground support, during aerial operations. The West District and the CA-WS trappers work closely together since many sheep and cattle allotments overlap the state's border. Protection efforts will be ongoing.

On May 30<sup>th</sup>, Pilot Gossard and CM VanderMay conducted aerial activities around several lambing areas, in Lyon County. Previously, three lambs (valued at \$600) had been killed by coyotes. During the flight, five covotes were removed within



close proximity of the depredation sites. WS Smith provided valuable ground support by locating the offending covotes for the air crew. Protection efforts will be ongoing.

During the month of May, Wildlife Biologist (WB) Zack Bowers continued to deter great blue herons. mallards, and coyotes from using/crossing the airfield. In an effort to keep these species from crossing the airfield, WB Bowers has utilized harassment with propane cannons, vehicle, and voice. Utilizing these methods WB Bowers has harassed 40 mallards, four great blue herons, and four blackcrowned night-herons from the airfield. WB Bowers has the ability to utilize pyrotechnics on the airfield as well. However, due to the dry conditions, WB Bowers has refrained from using them.

Throughout the month of May, Qualified Airport Wildlife Biologist (WB) Luke Barto continued to protect aviation safety at a local airport, removing: two mourning doves, two mallard ducks, two pigeons, one raccoon and one striped skunk. WB Barto also utilized non-lethal harassment techniques to disperse: 21 ducks, two American Avocets and three Canada geese.

Five bird/aircraft strikes occurred at the above mentioned airport throughout the month of May, with no reported aircraft damage. This is an increase from 2012, which only incurred one strike during the month. The ten year average for May is 1.4 birds struck. Two of the five birds were identified (a mourning dove and an American Kestrel).

Approximately 700 California gulls were harassed throughout the month of May from a privately owned open lot; located less than a mile from the aforementioned airport. For the past three years 300-500 California gulls have nested at this location and have a direct flight path over the airport to access feeding locations, becoming a wildlife strike hazard to air traffic. An integrated approach was utilized to harass the gulls included the use of dogs as well as an improvised drag to remove nesting material encourages the gulls to find an alternative nesting location; ultimately resulting in a new route to/from feeding locations that does not cross the airport.

On May 15<sup>th</sup>, Staff Biologist (SB) Jack Sengl and WB Barto provided a day-long pump action shot-gun safety and familiarization training course for airport personnel at a local airport.

#### **New and Developing Methods**

Nothing to Report

#### **Valuing and Investing in Employees**

Nothing to Report

#### **Information and Communication**

National Wildlife Disease Program Plague Surveillance Update (See next Page).

On May 9<sup>th</sup>, State Director (SD) Mark Jensen attended the Wildlife Damage Management Committee Meeting in Reno.

On May 10<sup>th</sup> and 11<sup>th</sup>, SD Jensen attended the NDOW Commission Meeting in Reno.

#### **Emerging Trends/Issues**

Nothing to Report

#### **Equal Employment Opportunity/Civil Rights (EEO/CR)**

Nothing to Report

#### **Future Meetings and Events**

East District Meeting. June 27<sup>th</sup> in Ely. SD Jensen and SB Sengl to attend.

National Wildlife Disease Program

20 May 2013

## PROGRAM ACTIVITY REPORT (PAR)



#### Plague Surveillance Update

The NWDP has been conducting surveillance for plague exposure in wildlife since 2006. This large scale surveillance project, which collects and screens samples from across the

western US, was initiated in response to the health risks associated with plague infection in humans, domestic animals, and species of conservation concern.

Plague is caused by the bacteria, Yersinia pestis, and while it often causes limited morbidity and mortality in some species, it can also

result in severe clinical disease and death in humans and other species. Human plague infections are now rare in the US, but they are still regularly documented and the disease remains a public health burden in other parts of the world. Domestic animal infections also still occur in the Western United States and the disease has been an issue for multiple threatened non-domestic species, such as the blackfooted ferret (Mustela nigripes) and the Canada lynx (Lynx canadensis).

In 2012, Wildlife Disease Biologists with the NWDP and collaborating health agencies collected 5400 samples for the Plague and Tularemia Archive. These samples originated

PositiveNegative

and Tularemia Archive and could be screened in the future using assays that are currently being developed. A majority of the positive animals in 2012 were coyotes (*Canis latrans*),

although one bobcat (*Lynx rufus*) also tested positive.

Looking at the surveillance effort in its entirety, from 2006 through the end of 2012, the NWDP has screened 30,155 samples for plague exposure; 9.4% were positive, although some specific species and regions within the overall project have average prevalence levels that are substantially

higher. This indicates that *Y. pestis* is very much present in the western landscape and that animals are regularly exposed or re-exposed to the bacterium. These data offer the opportunity to examine plague ecology in detail, and will hopefully continue to provide information on disease patterns across space and time. For more information, contact Sarah Bevins:

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from nearly 50 different species found across the US. A subset of these samples were submitted to the Centers for Disease Control for plague testing, and approximately 2% were positive for *Y. pestis* antibodies. This is a lower number than we typically see for overall plague prevalence, and likely reflects the limited amount of testing that is currently undertaken. Samples that have not yet been tested are being stored in the NWDP Plague

The original artwork on this page was created by the National Wildlife Disease Program's Erika Kampe and Sarah Gof



United States Department of Agriculture
Animal and Plant Health Inspection Service



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